

Real Time, Apparent Time and Age Grading

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Abstract

This paper intends to highlight three sociolinguistic concepts, namely apparent time, real time and age grading. It reviews the origin and importance of these three sociolinguistic constructs in relation to variationist sociolinguistics. It shows how these concepts are necessary to conduct and interpret statistical sociolinguistic data. Without a full grasp of such concepts, sociolinguists might fail to interpret their statistical data correctly. Within the apparent-time construct, researchers can take synchronic cross-sectional samples, instead of the time consuming longitudinal samples, in order to describe or interpret a linguistic change in any speech community. The real-time evidence, on the other hand, can be accomplished by searching the literature for similar previous studies or by repeating the studies after a lapse of time. Finally, the age-grading construct helps researchers distinguish between real changes in progress and temporary changes that often recur due to various social factors and/or pressures.

Keywords: real-time, apparent-time, age-grading, variationist sociolinguistics, language change

1. Introduction

At the heart of variationist sociolinguistics that started in the 1960s lie three important terms: real time, apparent time and age grading. All of the above represent approaches that try to explain variation and change in speech communities, either in the past, i.e., change that had occurred, or in the present, i.e., change in progress. As Wolfram (2006, p. 338) puts it, “speakers do not go to bed one night using a particular form only to wake up the next morning to find the form categorically replaced by another one”. Historians of language used to utilise the diachronic approach to language change. They used to compare linguistic data at two different historical periods without paying attention to what happened between them. In the 1960s, William Labov, the founder of variationist sociolinguistics, came up with a systematic method that enabled sociolinguists to study language change within the synchronic approach. He postulated that instead of observing linguistic change of the same speakers over a long period of time (real time), researchers can study the linguistic behaviour of different age groups at a particular time period (apparent time). His hypothesis claims that “linguistic differences among different generations of a population (apparent-time differences) would mirror actual diachronic developments in the language (real-time linguistic changes)” (Bailey, 2002, p.313).

The apparent time hypothesis is still a hypothesis and cannot be relied on blindly. Sometimes, linguistic differences among different age groups do not reflect a change in progress. They might rather reflect age grading. The linguistic phenomenon of age grading is considered one of the main dangers threatening the validity of the apparent time hypothesis as will be explained later.

This paper will try to discuss some empirical studies on each of the three concepts outlined above explaining the theoretical and methodological complications that accompany such empirical research. I will start with apparent time followed by real time and finish the paper with the challenges that age grading poses within the framework of variationist research.

2. Apparent Time

As I have showed in the introduction, the apparent time construct facilitates the way in which sociolinguists study language variation in different speech communities. It makes use of special sampling designs that include different age groups at a particular time period. It stems from “the assumption that differences across generations of speakers at a given point in time will mirror actual diachronic change” (Wolfram, 2006, p. 338).

Perhaps the best way to illustrate the apparent time construct is to review Labov’s Martha’s Vineyard (1963) and the Department Store studies. In fact, those two studies have laid the ground for variationist sociolinguistics although Labov himself admits that Gauchat (1905) had started the apparent time approach.

Martha’s Vineyard is an island off the coast of Massachusetts. At the time of Labov’s study it had over 6,000 inhabitants most of which lived in the eastern part of the island (down island). Almost one-third of the inhabitants lived in the rural western part of the island (up island). There were three major ethnic groups: Yankees, Portuguese and native people. Labov studied the centralisation of the diphthongs /ay/ and /aw/. His sample consisted of 69 Vineyarders from different age groups. His age-stratified sample exhibited the following behaviour in relation to the centralisation of the two diphthongs in question as we can see in table 1 (From Labov, 1972b, p. 22).

Age	(ay)	(aw)
75+	25	22
61-75	35	37
46-60	62	44
31-45	81	88
14-30	37	46

Table 1: the centralisation of /ay/ and /aw/ by different age groups

As table 1 illustrates, the centralisation increases going down from ages +75 to 61-75 to 46-60 and it reaches its highest in the age group 31-45. The centralisation then decreases in the youngest group 14-30. The last group poses a problem for the apparent time evidence of a change in progress, i.e., it exhibits behaviour similar to that in age grading. Labov considered other factors, such as ethnicity, occupation and place of residence. The centralisation was more obvious among Yankee origin, fishermen and up-islanders. The centralisation also correlated with positive attitudes towards the island. In other words, Labov found out that the more a speaker identifies positively with the island the more centralisation he/she would show in his/her speech. As for the young participants, Labov claimed that their behaviour did not exhibit age grading rather it reflected their uncertain feelings towards the island as some of them wanted to stay, some wanted to leave and some were uncertain. To put differently, he claimed that the generational differences in the centralisation of the two diphthongs reflected a change in progress (apparent time). He then supported his conclusion with real time evidence as I will show in the next section. The need for real time evidence, as Sankoff (2006) argues poses some theoretical and methodological problems for the validity of apparent time evidence on its own.

The second study to be reviewed here is Labov's (1966) that was conducted in 1962. Labov studied the pronunciation of the non-prevocalic /r/ by 264 employees of three department stores in New York: Saks, a luxury store that is frequented by upper-middle-class people; Macy's, a mid-range store that is frequented by lower-middle-class people; and Klein, a low-range store that is frequented by working class people. The variant under scrutiny, i.e., non-prevocalic /r/ was introduced as a prestige variable in New York after World War II. His method was to walk around in each of the three stores and ask the employees for the location of departments/sections he knew were on the fourth floor. He would observe how each employee would pronounce the non-prevocalic /r/ in "fourth floor", then he would pretend not hearing the initial response and seek a second response. He then transcribed in his notebook the two pronunciations, i.e., the initial spontaneous one and the second careful response. Table 2 (From Labov, 1972b, p. 51) shows that r-pronunciation was more in Saks than in Macy's and was more in Macy's than in Klein.

	Saks (%)	Macy's (%)	S. Klein (%)
All [r]	32	31	17
Some [r]	30	20	4
No [r]	38	49	79
Number	68	125	71

Table 2: r-pronunciation in three stores in New York

Labov also found out that in careful speech, the use of the non-prevocalic /r/ increased. Since I am discussing the apparent-time construct, I will leave many details and focus on age stratifications in the study. The results from Saks showed that younger people used /r/ more than the older people. The results from Klein were not decisive. Nevertheless, the results from Macy's showed the opposite, i.e., the /r/ pronunciation increased with age. This variation may have been interpreted as either an apparent-time evidence or as age grading. Labov, however, concluded that the results could be indicative of a change in progress (apparent-time) as members of the highest (Saks) and lowest (Klein) "social groups tend not to change their pronunciation after it becomes fixed in adolescence but subjects of the middle social groups sometimes do" (Wardhaugh, 2006, p. 166).

Although the above-reviewed studies are often mentioned in the literature as classic examples that have paved the way for variationist sociolinguistics, their conclusions and predictions are not totally sound and valid. In fact, the apparent-time construct itself suffers from some complications. Many linguists have pointed that out. Chambers (2008), for example, admits that the apparent-time construct is merely a hypothesis. I agree with Chambers (2008, p. 358) in respect of his point "that apparent time reflects real time is a hypothesis, not an axiom or a theorem."

I strongly believe that any apparent-time study ought to take every possible measure to insure that its conclusions and predictions are valid. It should try to exclude teenagers as one of its age cohorts. The reason for this is the documented instability of the individual vernaculars of teenagers. Cukor-Avila (2000) empirically showed that individual vernaculars are more stable during adult years than during adolescent years by interviewing two adults and two children who then became adolescents several times over a decade. In his review of Cukor-Avila's study, Bailey (2002, p. 324) concluded that apparent-time studies that "use teenagers as one of the age cohorts, then, must be viewed with some suspicion."

Apparent-time researchers should be aware of the danger that any detected variation between different age groups does not always mean a change in progress. Sometimes, such variation may be mere age grading. The phenomenon of age grading involves a linguistic situation “whereby members of a speech community alter their speech at some juncture in their lives in such a way as to bring it to conformity with adult norms” (Chambers, 2008, p. 358). This situation often repeats itself generation after generation; this is why it is not a change in progress. In Labov’s studies reviewed above, Labov himself was aware that the change he detected among different age groups might be age grading that repeats itself. This is why Labov supported his conclusions with real-time evidence. Thus, I believe that the biggest problem facing the apparent-time construct is that it needs real-time evidence, especially when it involves adolescents as one of the age groups. Because of the danger of using teenagers in apparent-time studies, Bailey (1991, p. 241) redefined the apparent-time construct as “differences among generations of similar adults mirror actual diachronic developments in a language.” In this definition, Bailey only included adults and excluded teenagers.

In the next section, I will show how real-time evidence is used in variationist sociolinguistics. I will focus on how real-time evidence is employed to support apparent-time conclusions and predictions.

3. Real Time

Chambers and Trudgill (1995) admit that the best way to get information about linguistic change is to use the real-time approach; that is, to survey a particular population using the same sampling design and elicitation tools at two different points in time and compare and contrast them looking for linguistic change. Labov (1994) states that there are two main ways for making real-time observations: ‘reviewing the past’ and ‘repeating the past’. The first way entails that researchers find previous studies in the literature related to the linguistic variable in question and review and compare the results of these studies that have been conducted in different time periods. The second way is more difficult because it entails going back to the “community after a lapse of time and repeat the same study” (Labov, 1994, p. 74). What follows is a detailed explanation of these two ways supported with some examples.

3.1 *Reviewing the Past*

Labov (1994) admits that this approach of making real-time evidence suffers from a number of problems and complications: 1) it is hard to find previous related studies to the variable under scrutiny, 2) previous data are often bad or fragmentary, 3) the method used in available previous studies might be unreliable, 4) the phonetic transcription used in studies conducted some decades ago often lack necessary details that makes comparisons with modern transcriptions very difficult to accomplish.

Labov’s (1963) study concerning the centralisation of the diphthongs /ay/ and /aw/ in Martha’s Vineyard was an apparent-time study. The conclusions of that study were supported with real-time evidence from previous literature. Labov compared his results in Martha’s Vineyard with those in the Linguistic Atlas of New England that were gathered in 1930s and reported by Kurath et al. in 1941. The Linguistic Atlas exhibited slight infrequent centralisation of the first diphthong /ay/. Thus, comparing the data for this diphthong was indecisive. Fortunately, as Labov admits, the Linguistic Atlas showed no trace of the centralisation of the second diphthong /aw/. This lack of centralisation in the 1930s proves that a change had occurred between the 1930s and the 1960s and, hence, supports the apparent-time conclusions of Labov’s study.

3.2 *Repeating the Past*

As stated above, the second approach in making real-time data is to repeat a previous study after a period of time and then compare and contrast the new data with the past data. Repeating the past studies can come in two forms: trend or panel studies. The former involves replicating all of the procedures followed in the previous study but using a different sample. The latter involves replicating everything including using the same sample. No doubt that trend studies are simpler and more doable than panel studies and this is why they are more available in the literature than panel studies.

Labov’s (1966) Department Store study concerning the non-prevocalic /r/ was an apparent-time study as I have showed above. This study was replicated in (1986) by Joy Fowler. She followed similar procedures to that of Labov’s but, of course, she did not study the same sample; thus, her study is a good example of real-time trend studies. Moreover, by the time of the replication study Klein was not in business; therefore, she had to substitute it with May’s, a similar store to Klein in almost every aspect. Fowler’s 1986 replication study exhibited similar results to that of Labov’s 1962 study but with higher percentages. Figures 1 and 2 (from Labov, 1994) compare the results of 1962 and those of 1989 concerning three age groups.

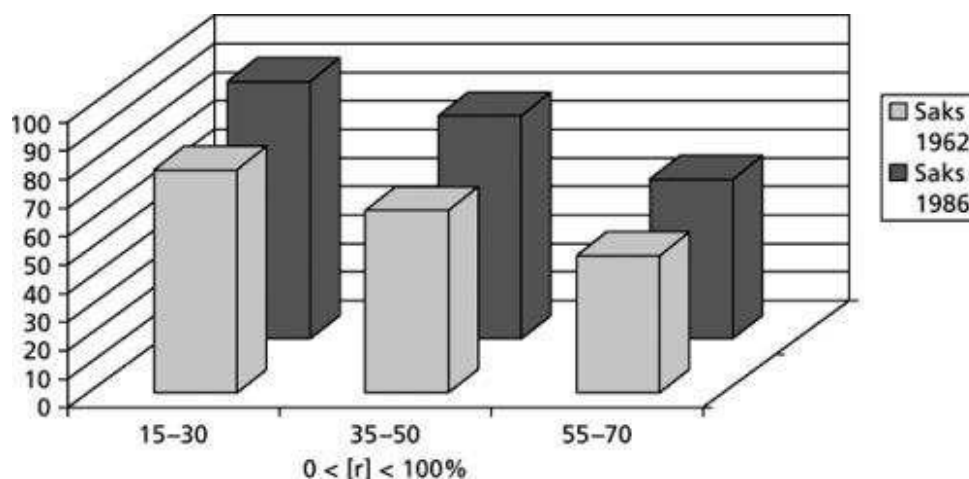


Figure 1: r-pronunciation in Saks both in 1962 and in 1986

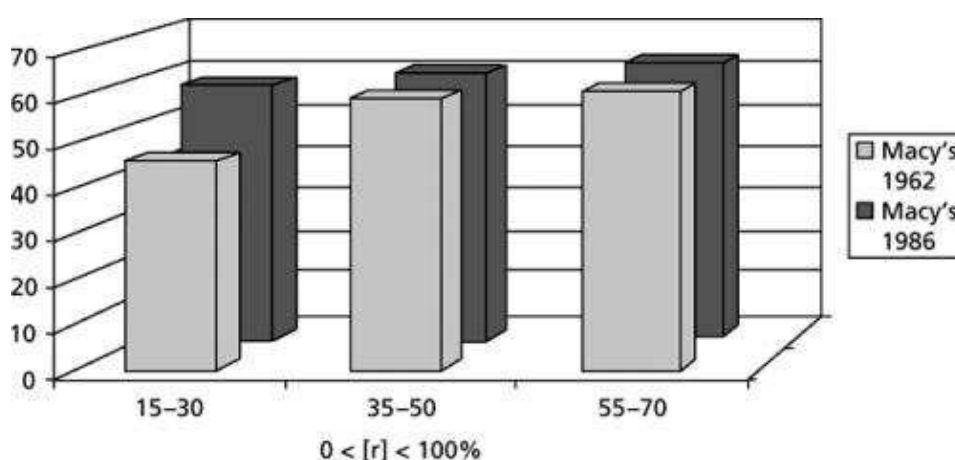


Figure 2: r-pronunciation in Macy's both in 1962 and in 1986

As can be seen in figures 1 and 2, the pronunciation of the non-prevocalic /r/ in New York exhibits the same pattern for the three age groups in both Saks and Macy's but with some higher percentages in 1986 as compared with that in 1962. Fowler's replication study is a real-time trend study that confirmed Labov's hypothesis that "the development of a new prestige norm of constricted (r) is leading to linguistic change, but the new data also show that the change is proceeding slowly" (Bailey, 2002, p. 327). The replication study also detects some patterns of age-grading or the so-called 'sociolectal adjustment'. This is maybe due to the fact that the change in New York is a 'change from above' concerning prestige and that the lower-middle-class people take time before they become aware to the new prestige norms that is undergoing change in progress in the higher social classes.

The above reviewed replication trend study is a useful real-time evidence but it is not perfect. Replicating previous studies has the danger of facing a number of potential problems. Communities do not stay stable over long periods of time. They migrate, receive immigrants, suffer invasions, etc. For example, between 1962 and 1986 Klein closed down and made it difficult to replicate Labov's study. Fowler had to substitute it with May's.

4. Age Grading

When discussing the apparent-time construct above, I have mentioned that linguistic differences among different age groups do not always reflect a change in progress. They might, instead, belong to a "pattern that repeats itself in a community in generation after generation" (Chambers, 1995, p. 203).

For instance, Macaulay (1977) shows that in Glasgow the use of the glottal stop /ʔ/ as a variant for /t/ is highly stigmatised and is a feature of working class speech, i.e., it is a stable class marker. Strangely, Macaulay found out that 10-year-olds in the middle-middle class (MMC) show a linguistic behaviour similar to that of the working class. The 15-year-olds and adults of the MMC, on the other hand, do not show this behaviour. As Chambers (2008) rightly argues, this variation among the age groups of the MMC might be interpreted as a change in progress. However, because we know that this variant is stable in Glasgow and because it is highly stigmatised, the logical interpretation of this variation would be that it reflects age grading. In other words, 10-year-olds of the MMC do not become fully aware of the linguistic norms concerning the use of the glottal stop until around the age of 15 when social pressure from adults increases.

Like the conclusion of the apparent-time studies, this conclusion comes as an inference not as a direct observation (Chambers, 1995). In order to be entirely certain, those 10-year-olds have to be observed and re-surveyed around the age of 15 in order to see if they would switch to the adults' norms. In other words, real-time evidence is necessary to double check age-grading inferences.

Another study involving age grading comes from Canada and discussed in Chambers (1995). The last letter of the alphabet is called 'zed' in almost all countries of the world except in the United States where it is called 'zee'. In southern Ontario, Canada, the American pronunciation of this letter is highly stigmatised and resented by adults. Nevertheless, children of many generations have been learning the American pronunciation as a result of pre-school American television, particularly *Sesame Street*. The song known as the Alphabet Song contributes to the spread of the American pronunciation in southern Ontario. Linguistic observations as well as empirical studies have repeatedly shown that the Canadian children gradually change their pronunciation to 'zed' as they grow up. Different age groups in Toronto were surveyed in 1979 and resurveyed in 1991 focusing on the way they pronounce the last letter of the alphabet. The results show that "the pattern of declining use of 'zee' as people grow older repeats itself in succeeding generations" (Chamber, 1995, p. 207). This variation is undoubtedly an age-graded change not a change in progress as the presence of two comparable surveys presents us with real-time evidence. Ironically, non-linguists in Canada seem to mistakenly judge this linguistic variation as a change in progress; therefore, newspapers repeatedly spread alarms to the high frequency of 'zee' among children in southern Ontario. This emphasises the importance of sociolinguistics in real-life situations.

5. Summary and Conclusion

In this paper, I have discussed and illustrated three sociolinguistic concepts, namely apparent time, real time and age grading. I have highlighted the importance of these constructs in sociolinguistic research. I have shown that the apparent-time construct is very useful in variationist sociolinguistics as it equips researchers with a useful tool to identify change in progress in speech communities. Within the apparent-time approach, researchers do not have to observe speech communities for long periods of time in order to identify linguistic change. They, instead, can take a synchronic cross-sectional sample from different age groups and study them. Any linguistic variation due to age can be potential change in progress. The word 'potential' is very important here as variation due to age can bear one of two possible interpretations: either a change in progress or an age-graded change. To arrive at one of these two possible interpretations is not straight forward. The best way to support any of the two interpretations is to use real-time evidence. Real-time evidence can be accomplished by searching the literature for similar previous studies or by repeating the study after a lapse of time. Undoubtedly, finding previous studies is not easy. Even when found, previous studies often suffer from methodological problems simply because they are conducted by different researchers using different tools. Repeating the study, on other hand, involves some complications. If we decided to repeat it as a panel study, it would be almost impossible to find the same sample due to immigration, unwillingness to re-participate, death and other demographic factors. If, on the other hand, we decided to repeat it as a trend study, we should make sure that the new sample is representative and similar to the one in the previous study. Sometimes, things happen over time that are beyond the control of the researcher. For example, when Fowler (1986) decided to replicate Labov's Department Store study, he discovered that one the stores ran out of business.

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